
African birds in traditional magico-medicinal use— a preliminary survey

Mark Cocker

Malgré le fait que l'usage magico-médicinal d'oiseaux en Afrique sub-Saharienne joue un rôle important dans la formation des attitudes envers les oiseaux et la nature en général, le sujet a été largement négligé par les environmentalistes. L'article donne un aperçu préliminaire de la collecte et la vente commerciale de peaux d'oiseaux destinées à cette fin, basé sur des recherches effectuées pendant un voyage de sept semaines au Bénin et au Cameroun. L'auteur examine la nature du commerce d'objets magico-médicinaux, l'échelle à laquelle il est pratiqué et ses implications éventuelles pour la conservation. Une liste des espèces trouvées sur les marchés africains est présentée et une attention particulière est accordée aux croyances sur lesquelles ces pratiques sont basées.

In the commercial markets of any one of the West African countries on the Atlantic coast between latitudes 5°W and 15°E you can encounter stalls displaying a profusion of animal skins and body parts. Strong smelling, swarming in flies but often arranged to create a macabre and compelling spectacle, the skins form part of magico-medicinal practices that are also current elsewhere in sub-Saharan Africa. These ancient indigenous traditions may be rooted in the very origins of agrarian society on the continent. Yet today, in order to supply this cultural demand, 1,000s, possibly hundreds of thousands, of birds of at least 80 species are being killed. The harvest may eventually have some bearing on the future conservation status of some species involved. Certainly the practices are a key factor in shaping African attitudes toward birds and other wildlife. Despite this, the magico-medicinal use of birds has been largely neglected by ornithologists. This paper presents some of the results of a seven-week trip to West Africa to investigate the subject³.

The paper has five principal aims: i) to provide a preliminary sketch of the geographical area in which the practices are important; ii) to identify species already known to be caught and killed for such purposes; iii) to sketch the cultural rationale and specific beliefs that underpin some of the traditions; iv) to suggest the possible conservation implications of the trade; and v) to act as a baseline statement on the subject, alert other birders to its potential significance and hopefully encourage them to submit observations and findings to the author. It should therefore be read as much as a plea for further information as a statement of what is actually known.

Bird markets in West Africa

The most accessible and compelling source of evidence for the traditional use of wild birds is the sections of

local markets devoted to their sale. These skin-and-bone stalls are a routine component of markets in many towns and cities. Some of them, such as Bé in Lomé, Togo have apparently become famous tourist attractions, and the vendors' insistence on payment for tourist photographs and video footage may be an important part of their overall financial return.

The skins stalls are widely found in four countries—Ghana, Togo, Bénin and Nigeria—and are commonly known as 'fetish markets'. (However, this is potentially misleading on two counts. Firstly, the skins stalls are never separate entities distinct from the general market. They may well all be grouped together but that compartmental structure is typical of African markets. Secondly, birds operate as part of a much wider range of religious and magico-medicinal rituals than those defined by the word 'fetish' and 'fetishism'. These terms are applicable mainly or even entirely to those West African countries where voodoo was, or remains, an important part of traditional religious life, such as Togo and Bénin.) Use of birds as medicine has also been recorded in Cameroon, Guinea, Côte d'Ivoire, Morocco (Gerhard Nikolaus *in litt*) and South Africa, while bird skins may also be a regular feature of market life in Niger (Joost Brouwer *in litt*), Mali and Chad.

I visited stalls in four main Béninois markets—at the capital Porto Novo, Bohicon, Abomey and Cotonou. (I also searched for skins stalls in the markets at Bamenda and Douala, in Cameroon, but found only limited evidence of a trade in birds. The main items for sale were individual feathers that may be harvested from moulting birds.) All four Béninois markets are permanent daily features of town life, although each location has a special market-day when there is a greater volume of both buyers and vendors. This applied as much to the skins stalls as to the other types of market produce. It appears that individual bird-

skin vendors, if not permanently present at the principal regional market, travel to smaller outlying towns and villages to attend their special market-day. However, by visiting a major town on its main market-day one could ensure coverage of almost all the skin dealers in that particular region.

It is worth noting that to anyone unaccustomed to these places a fetish market can be unsettling. Each stall comprises an assembly of skulls and skins arranged in a powerful, if often rather disturbing, display that can include horse and hyena heads, crocodiles, dried snakes and monkey skulls. The presence of so much slowly decomposing flesh, crudely preserved with only ash or salt, makes for a very unhealthy background odour and a super-abundance of flies. However, surveying the markets is one of the best ways to assess the volume of birds being killed and to identify the species currently being used. The stall holders can also be important sources of information on both the methods of capture and the cultural beliefs that underpin the exploitation of birds.

A note of caution should be introduced at this early stage. Not all skins stalls welcome interest from non-locals and this is especially the case in southern Nigeria. People of European background should be particularly receptive to the wishes and sensitivities of stall holders and their customers, and preferably approach the markets with a local person (Anne Nason *in litt*). Anyone planning to investigate skins stalls in other countries should operate on a precautionary principle and exercise similar discretion.

It was interesting to note that, in Bénin, the dealers were almost without exception young men and youths, with an occasional older male. Stalls were never attended by women, which is noteworthy given that much of Béninois commercial life is conducted by females. It was also notable that medicinal stalls selling herbs, bark and stones or crystals—further items in Africa's traditional pharmacopoeia—were also attended by women. Only the bone and skins stalls were a male preserve. This may be because of female taboos against contact with certain animal products, such as tortoises, whose carapaces are a regular feature in the markets. Although some of the dealers, particularly in Dantokpa, were resident merchants with permanent market pitches and business cards, others may be itinerant Muslim 'Alfas', traditional Islamic medicine men who range across West Africa to ply their trade as far afield as Sénégal and Mali (Patrick Claffey *in litt*).

Bird assemblies accounted for approximately a third of all items on display, although sometimes a stall would have no more than random and unidentifiable bundles of feathers. However, others had impressive

collections of birds, involving 100s of individual skins of up to 20 different species. Some were in a poor state of preservation and can be difficult to identify. It may well also suggest that they have been on sale for a long period. In fact, during all the time I spent in the markets not a single purchase or even a prospective customer was noted. Indeed, I was often the only interested observer. It is possible that the six-month 'shelf life', suggested by Mark Taylor and Jeremy Fox, for skins in the market in Lomé, Togo, is a conservative estimate¹⁰.

International structure of skin trade

The absence of information on rates of sale needs to be balanced against the solid fact that traded animal parts can be transported large distances, in some cases crossing international borders. This suggests the strong financial incentives underpinning the whole business. For example, the heads of three Spotted Hyenas *Crocuta crocuta* and parts of two Chimpanzees *Pan troglodytes* were noted in Cotonou, with another chimpanzee in Porto Novo market. Yet, wild populations of the former occur no closer than c500 km distant, while the latter specimens must have travelled at least from Nigeria or Ghana. Similarly, a skin of a Red-chested Owlet *Glaucidium tephronotum* has been found in Bohicon market, Bénin, yet the species' known range comes no closer than central Ghana (Patrick Claffey *in litt*). Equally, Great Blue Turaco *Corythaeola cristata* does not occur in the Dahomey Gap, yet a head of this species was found in Dantokpa market in Cotonou.

Bird species occurring in African markets

The following list principally comprises species noted by the author in Bénin and Cameroon. The birds found in Bénin are followed by notes on their status based on the forthcoming *BOU Checklist of the Birds of Bénin* by Patrick Claffey⁴. Also listed are other bird species found in markets and recorded in published literature or documents⁵ or personally reported to the author (Gerhard Nikolaus *in litt*). These are marked with an asterisk and are followed by the country in which they were located.

- Ostrich *Struthio camelus** (South Africa)
- Shy Albatross *Diomedea cauta** (South Africa)
- White Pelican *Pelecanus onocrotalus** (South Africa)
- Black-crowned Night Heron *Nycticorax nycticorax** (Togo)
- Cattle Egret *Bubulcus ibis*—abundant
- Western Reef Heron *Egretta gularis** (Togo)
- Hamerkop *Scopus umbretta** (South Africa)
- Hadeda *Bostrchia hagedash** (South Africa)
- Bald Ibis *Geronticus eremita** (Morocco, 1969)
- White-faced Whistling Duck *Dendrocygna viduata** (South Africa)

Ducks Anatidae—usually just heads and involving only domestic varieties, including some identifiable as Muscovy Ducks.

Black-shouldered Kite *Elanus caeruleus*—common and widespread

Black Kite *Milvus migrans*—common and widespread

Hooded Vulture *Necrosyrtes monachus*—common and widespread

African White-backed Vulture *Gyps africanus*—uncommon

European Griffon Vulture *Gyps fulvus** (Morocco 1969)

White-headed Vulture *Aegyptius occipitalis** (South Africa)

Marsh Harrier *Circus aeruginosus*—common in the south

Shikra *Accipiter badius*—most common small raptor

Red-necked Buzzard *Buteo auguralis*—common

Tawny Eagle *Aquila rapax** (South Africa)

Martial Eagle *Polemaetus bellicosus* (Cameroon)

Common Kestrel *Falco tinnuculus*—common

Lanner *Falco biarmicus** (Morocco 1969)

Double-spurred Francolin *Francolinus bicalcaratus*—abundant

Helmeted Guineafowl *Numida meleagris*—(probably domesticated) in wild not uncommon but probably declining

Lesser Moorhen *Gallinula angulata*—rare with only few records

Blacksmith Plover *Vanellus armatus** (South Africa)

Grey-headed Gull *Larus cirrocephalus** (South Africa)

Pigeons Columbidae (usually feral or domesticated)

Senegal Parrot *Poicephalus senegalus*—abundant

Grey Parrot *Psittacus erithacus*—status uncertain, Béninois population possibly a product of escaped cagebirds. Nearest known wild population in Nigeria.

Green Turaco *Tauraco persa*—not uncommon

Great Blue Turaco *Corythaëola cristata*—no records for Bénin

Purple-crested Turaco *Musophaga porphyreolepha** (South Africa)

Violet Turaco *M. violacea*—common

African Cuckoo *Cuculus gularis*—not uncommon

Senegal Coucal *Centropus senegalensis*—common

White-browed Coucal *C. superciliosus** (South Africa)

African Grass Owl *Tyto capensis** (South Africa)

Barn Owl *T. alba*—common

Marsh Owl *Asio capensis*—rare resident

White-faced Scops Owl *Otis leucotis*—common

Spotted Eagle Owl *Bubo africanus** (South Africa)

Pearl-spotted Owlet *Glaucidium perlatum*—common

Red-chested Owlet *G. tephronotum*—no records for Bénin

Little Owl *Athene noctua** (Morocco 1969)

African Wood Owl *Strix woodfordii*—(Cameroon)

Nightjar sp. *Caprimulgus* sp.

Red-necked Nightjar *Caprimulgus ruficollis** (Morocco 1969)

Woodland Kingfisher *Halcyon senegalensis*—common

African Pygmy Kingfisher *Ceyx picta*

African Giant Kingfisher *Megaceryle maxima** (South Africa)

Pied Kingfisher *Ceryle rudis*—common

Abysinnian Roller *Coracias abyssinica*—common

Blue-throated / Broad-billed Roller *Eurystomus gularis / glaucurus*—common

Hoopoe *Upupa epops** (Morocco 1969)

Abysinnian Ground Hornbill *Bucorvus abyssinicus*—uncommon, probably confined to northern national parks

Southern Ground Hornbill *B. cafer** (South Africa)

African Pied Hornbill *Tockus fasciatus*—common

African Grey Hornbill *T. nasutus*—common

Trumpeter Hornbill *Ceratogymna bucinator** (South Africa)

Brown-cheeked Hornbill *C. cyllindricus*—uncommon resident

Bearded Barbet *Lybius dubius*—common

Yellow-fronted Tinkerbird *Pogoniulus chrysoconus*—common

Golden-tailed Woodpecker *Campethera abingoni** (South Africa)

Grey Woodpecker *Dendropicops goertae*—common

Barn / Ethiopian Swallow *Hirundo rustica / aethiopica*

White-breasted Cuckoo-Shrike *Coracina pectoralis*—not uncommon

Common Bulbul *Pycnonotus barbatus*—abundant

Robin-Chat sp. *Cossypha* sp.

African Thrush *Turdus pelios*—common

Black-headed Bush Shrike *Tchagra senegala*—common

White Helmet-Shrike *Prionops plumatus*—common

Pied Crow *Corvus albus*—not uncommon but local

Vieillot's Black Weaver, western race *Ploceus nigerimus castaneofuscus*—not uncommon

White-billed Buffalo-Weaver *Bubalornis albirostris*—rare resident, single record

Red Bishop sp. *Euplectes* sp.—common

Paradise Whydah sp. *Vidua* sp.

Commercial value of bird skins

With assistance from a Béninois ecology graduate, Patient Coubeou, it was possible to penetrate the potential disparity in prices for tourists and for local people and to assess skin values with some degree of accuracy. Large birds of prey and owls were usually offered for c1,000 francs (CFA) each (UK£1)—a price that did not fluctuate too widely from location to location, and even between two countries. However, values apparently changed according to season. In the wet season, when conditions made catching difficult and/or the birds themselves were perhaps scarcer, a Black Kite might go up from its dry season price of CFA 300 francs to a wet season high of approximately CFA 700. This was the price paid to the catcher, after which a market seller would add his profit margin. Condition was another factor that influenced price, the charge to the customer increasing if the skin was of high quality. To put these values in context, skilled tradesmen in Bénin earn a daily wage of around CFA 2,000.

Methods of capture

Bird skins and parts came from two principal suppliers: a) *adventitious collection* by amateurs—ie the child with a catapult—who then sold on items either to the market vendors directly or to professional hunters with guns; or b) *organised collection* by professional hunters. West Africa has an important and highly organised market in bushmeat and hunters working in this trade also shoot or trap items for magico-medical use.

The means of capture involved four principal methods. *Shooting*—this varied from a stone or comparable missile thrown by hand or catapult, to a bow and arrow or a gun. Both locally made and imported firearms were observed or reported to be in use by hunters. *Traps*: these included simple baited snares where the bird's feet become caught in a noose. Live examples of individual Black Kite, Marsh

Harrier, Red-necked Buzzard, Barn and White-faced Scops Owls were all on offer in Béninois markets. Another method described by a medicine man in north-west Cameroon and almost certainly used in Bénin (where small gin traps, mainly for the capture of Cane Rats *Thryonomys* sp., were frequently observed) and intended to catch owls or birds of prey, involved open-jaw spring-release traps placed on a suitable tall flat-topped perch, like a tree stump, and baited with a small chick. The bird lands to take the lure, triggers the release mechanism and is immediately caught in the steel teeth of the trap. *Gum*: a third method of entrapment involves the use of a form of gum obtained from some species of parasitic plant (glue obtained from mistletoe is a method still used to trap birds in the Mediterranean region) smeared on a series of fine bamboo/wood slivers. The bird of prey lands in the centre of these fine stakes to take the chick bait and as it flaps its wings immediately becomes glued to the sticks and unable to fly. *Capture at the nest*: this method used for hole-nesting birds involves entrapping the bird in the nest cavity. In the case of kingfishers, a family apparently prized for medicine in the Bamenda Highlands of Cameroon and in Bénin, the nest hole is blocked up with mud when the birds are observed to have entered. Several hours later the suffocated bird is dug out.

An historical context for the use of birds in traditional medicine

In Europe, North America and Australasia the conventional attitude toward the use of wild-caught animals in systems of traditional medicine tend to be negative. Typically, the widespread media images of Tigers *Panthera tigris* slaughtered to supply a highly lucrative Asian market has caused deep Western antagonism toward traditional Chinese medicine—the final destination for the bones and body parts of this critically endangered felid. Similarly, the widely-publicised depletion of African and Asian rhinoceros species because of the demand for horn and its supposed aphrodisiacal properties is vehemently and justifiably condemned in the West.

But before the urge to moralise overcomes any reader of European background we should first recall that the magico-medical use of animals was once a routine part of Western culture. Those traditions had very ancient roots and held currency among some of the region's most distinguished intellectuals, even if some of the remedies now appear extraordinary, if not ludicrous. Typically incomprehensible is an ancient Greek belief that staring directly into the eyes of a Stone Curlew *Burbinus oedicephalus* could cure a sufferer from jaundice. The philosopher and historian

Plutarch wrote 'such is the nature and such the temperament of the creature that it draws out and receives the malady which issues like a stream, through the eyesight'. Bird trappers even kept their Stone Curlews hooded in order that potential customers could not obtain the cure for free!⁶

The same principle of sympathetic magic led medical practitioners of the classical world to assume that eating owls' eyes or the contents of eagles' gall bladder would improve eyesight, while Nightingales' *Luscinia megarhynchos* tongues could enhance an individual's vocal abilities. The brains of a crane were deemed a powerful aphrodisiac, while vulture's liver was sovereign against gout, indigestion and cataracts⁹. And such examples of presumed medicinal properties could be extended across much of Europe's avifauna.

For modern ornithologists, liberated by the rational strictures of science, it is even more unnerving to discover that these medical recipes retained their shelf life long in to the early modern era. In the late 17th century Sir Thomas Browne, himself a founding father of the study of wildlife in Britain, described the sale of Rooks' *Corvus frugilegus* livers in Norwich as a cure for rickets². Francis Willoughby, a naturalist of comparable standing to Browne, recommended a recipe for epilepsy that involved an ounce of white wine and castor oil mixed with the carcasses of 100 swallows¹. Having read of these historical magico-medical traditions, one cannot avoid a sense of *déjà vu* on discovering basketfuls of Ethiopian Swallows *Hirundo aethiopica* for sale as medicine in the Dantokpa market of Cotonou.

The point needs repeating: the principles of sympathetic medicine, involving the use of birds and bird parts, have been applied the world over. Indeed, the universal character of these systems reminds us of a common heritage shared by all human communities. It is with this fact firmly in mind that one should approach current African practices, ie with a degree of understanding and sympathy, although not necessarily with outright approval.

Specific uses of birds in African traditional medicine

It was impossible to establish the individual uses of every different bird found in the markets of Bénin. However, several examples are given to indicate the infrastructure of beliefs that underpins their capture and sale for magico-medical purposes.

Yellow-fronted Tinkerbird

In Bénin this species is widely viewed as an auspicious bird, a bringer of good luck and health. Musicians, dancers, singers and those generally involved in the

manipulation of speech especially prize it. The bird is known in northern Bénin as *le musicien*, 'the musician'. The bird is common and widespread in Bénin but was only noted in any number on the skins stalls in the Cotonou market, Dantokpa. However it is apparently also important amongst several northern Béninois tribes. The bird is fried to a charred cinder and then ground up, either to be added to a drink or mixed with other food or added to African soap that is then used for washing. It is thought to enhance the musical or vocal performance and is highly prized as a medicine prior to ceremonies and celebrations (Patrick Claffey pers comm). In Dantokpa a stall holder indicated that this was the single most valuable species he held, and suggested a price of around CFA 5,000 (UK£5), a large sum in Béninois terms.

Owls

Of all birds occurring in West African markets the most important species are owls. In Béninois markets they regularly comprise more than 50% of the entire bird skins on any one stall. They are deeply feared as omens of ill health, death and bad luck. In fact, in Cameroon, the pidgin English name for the owl is 'witchbird', a title expressing a link between this bird family and witchcraft that is widespread across sub-Saharan Africa. In Malawi, for example, Heimo Mikkola conducted surveys into attitudes toward owls and found that 80% of interviewees thought owls were evil birds^{7,8}.

It is thought that witches have the capacity to metamorphose into owl form in order to go about their business undetected. That particular belief straddles many cultural strata within African society, from the most highly educated to village level.

It is this central role in witchcraft that makes the owl such powerful medicine and accounts for its status as the most common bird in West African markets. Its uses are various, eg those who practise black magic to harm or attack their enemies utilise owl parts in their aggressive spells. However, working on the same principle as a vaccination, traditional African doctors also use owls to fight fire with fire, and protect their own clients from the presumed harmful effect of another sorcerer's owl magic. Thus, people eat parts of the owl's body, notably the heart (I was told in Cameroon that this could be sold for a price comparable with the bird's entire skin—around CFA 1,000), or burn and grind the feathers to powder to add to herbal medicines. Owl feathers and flesh are also made into amulets and worn on the body as protective medicine. It is believed that any witch in owl form or possibly any owl controlled for witchcraft purposes would immediately die on contact with a person bearing an

owl talisman.

Once again, it is valuable to recall that both the owl's status as a bird of ill omen and its intimate connection with witchcraft is not an exclusively African phenomenon. Similar beliefs are still widespread in South and North America among indigenous communities, and the same complex of ideas was current in Europe well into the early modern period. Indeed, vestiges of these beliefs apparently persisted in parts of rural Europe until the 1950s, when Barn Owls were routinely nailed spread-eagle on farm buildings to ward off storms, lightning and the evil eye (Eric Burnier pers comm).

Attitudes toward wildlife by those involved in magico-medicinal practices

It goes without saying that the people involved with the magico-medicinal trade and use of birds show little or no reticence in what they are doing. On the contrary, the vendors of skins, the traditional doctors and their patients, which includes some educated to university level, usually believe implicitly in the value of the practices. (In fact the placebo effect of this form of ritual, which their wholehearted trust implies, is one possible benefit of the therapy.) In Bénin I found that any reticence to allow me to examine or discuss traditional medicine was usually an economic matter and their doubts were easily overcome by financial payment.

I also found that skin sellers often openly displayed prize exhibits with a degree of pride. Live birds were handled in the most brutal fashion. Stall holders removing owls from cages to show me, routinely broke feathers and I suspect would have broken the bird's limbs to extract it more easily. No attempt is probably made to keep live birds in a healthy state and a live captive Marsh Harrier I saw on 20 January 1999 was dead by the 22 January.

Conservation implications of traditional African magic and medicine

Almost all the birds found on skin stalls in Bénin are described as common or not uncommon in Claffey's forthcoming checklist¹. Only five species are listed as uncommon or are more scarce—African White-backed Vulture, Lesser Moorhen, Marsh Owl, Brown-cheeked Hornbill and White-billed Buffalo-Weaver. Two other species—Red-chested Owlet and Great Blue Turaco—have never been recorded live in the country. However, there is no evidence that the specimens found on skins stalls originated in Bénin.

The level of harvest is probably relatively small and in Bénin as a whole probably does not exceed a six-figure total within a year. However, the number of

skins at any one time is probably not fewer than a five-figure total. And, taking into account the fact that bird-skin markets routinely occur across four West African countries, Ghana, Togo, Bénin and Nigeria, one can assume that the annual trade certainly involves tens, possibly hundreds of thousands of birds. Much additional research is necessary to establish rates of usage and the scale of the market.

At present a number of issues need to be considered. The pressure imposed by the magico-medicinal market on certain families of birds may be quite considerable. Owls are an obvious example. Their central importance in traditional practices means that they are often the most numerous item in a market. Individual stalls in Bénin sometimes held as many 50 skins, mainly Pearl-spotted Owlet. It must be the case that owl populations are partially controlled by the large off-take, if seldom entirely eradicated. This could become a much more significant issue if other pressures were brought to bear. For example, if this magico-medicinal harvest were to combine with the widespread use of non-specific agrochemical pesticides, then the long-term effect could be greater.

The deep taboo attached to owls in Africa also presents a serious cultural challenge to anyone interested in their conservation. Six species found on the African continent are currently listed as Red Data species or as Near-Threatened. Policies designed for their conservation need to take account of this profoundly negative public image and also the ongoing harvest of owls for traditional medicine, which is probably transcontinental in character.

There are a number of species already seriously affected by habitat loss that also feature strongly in traditional African medicine. Hornbills are the best example. Brown-cheeked Hornbill is listed as a Near-Threatened Species. Forest clearance may represent the single most important factor in this depletion, but the annual harvest for medicinal usage should not be overlooked. Hornbill casques were found in all the main Béninois markets although some of the species involved do not occur in this area and must be imported products. Equally a medicine man in north-west Cameroon, where *Ceratogymna* hornbills do not occur either, told me that he had paid CFA 5,000 for one casque he showed me. That figure is a considerable inducement for hunters to maintain the traffic.

Another species recurrent on Béninois skins stalls was the Abyssinian Ground Hornbill. Given the bird's low recruitment rate and the low density where it does occur, one may surmise that throughout West Africa it is seriously affected by the harvest for traditional medicine. In Bénin itself it is believed not to occur outside the national parks in the far north.

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9 Primrose Road, Thorpe Hamlet, Norwich, Norfolk NR1 4AT, UK.